

GATE DRIVER ASIC FOR AN AUTOMOTIVE STARTER/ALTERNATOR

**ABSTRACT OF THE DISCLOSURE**

A starter/alternator system for an engine and a battery of an automobile are provided. The system includes a starter/alternator machine; a three phase MOSgate control inverter/bridge electrically coupled to the starter/alternator machine, the three phase MOSgate control inverter/bridge including bridge connected MOSgated devices; a control ASIC electrically coupled to the bridge connected MOSgated devices of the three phase MOSgate control inverter/bridge, the control ASIC including all control circuitry required to control the starter/alternator machine; and a motor drive circuit electrically coupled to the control ASIC.